Design Philosophy

The design philosophy of Volume 3 establishes the standards for signage, wayfinding, accessories and artwork and enhances the healthcare environment, the facility's public image, and promotes employee morale. The standards are established to meet the following criteria:

Durability

•Interior Signage is a high-impact and fracture resistant combination of molded plastic and aluminum with integral color and matte finish

•Signage materials are simple, high quality and readily available

•Accessories are commercial grade and can be securely mounted

Cost

•Products recommended are to be purchased in accordance with existing federal contracts and GSA Schedules

•In selecting accessory products (such as table lamps, audio-visual arts, etc.), consideration is given to manufacturer's warranty and service agreements

Aesthetics

•Colors are chosen from the recommended accent colors and finishes found in Volume 1

•Finishes remain consistent throughout the department and/or the facility

•Artwork is appropriate in scale and subject matter to all of the patient population

Life Safety

•Accessories are placed so as not to interfere with traffic patterns or to be easily dislodged

•Signage meets ADA requirements, complies with Military Handbook 1191 (which was republished in 2003 as the Unified Facilities Criteria UFC 4-510-01) and Design Instructions. *Note: The UFC 4-510-01 shall be referred to as the Military Handbook 1191 in this document.*

•To avoid confusion, artwork is not grouped with signage unless it is part of the wayfinding system

Design Philosophy

Flexibility

•Modifications and changes to signage are easily accomplished on site

•The sign schedule included in this volume enables the facilities personnel to keep accurate records of name changes, types of signs and installations for ease of replacement and modification

•The schedule of artwork installations enables the facilities personnel to keep accurate inventory records and change displays when necessary

Evidence-Based Design

Evidence Based Design is the practice of implementing design elements into the healthcare environment, which are supported by research and evaluations; these Evidence Based Design decisions favorably impact patient outcomes and enhance the healing process.

Select signage, wayfinding, artwork and accessories that enhance the healing environment by:

- •Reducing spatial disorientation through wayfinding cues.
- •Providing positive distraction through nature scenes (photographic artwork) and audio of nature sounds
- •Provide items that are anti-microbial and do not support mold or mildew growth.

Updated Information on the ADA

The ADAAG was updated on February 23, 2004, and signage criteria has changed (significantly, in some cases). For the latest information on signage, the new requirements are located in Chapter 7 “Communication Elements and Features”, Section 703 of the ADAAG, and can be found at the ADAAG website (http://www.access-board.gov).

Additional Resource

The DoD Military Handbook 1191 also has guidance on Wayfinding and Signage (see Section 21), which clearly indicates signage requirements for U.S. Military healthcare facilities. The MIL HNDBK 1191 outlines several different types of signage systems, and their respective criteria. More information can be found on the US Army Health Facility Planning Agency website at http://hfpa.otsg.amedd.army.mil.

Wayfinding Concepts

Wayfinding describes the process of decision making required of an individual to reach a destination. The individual must be aware of his spatial environment, and must make decisions concerning a plan of action, or path of travel from location to destination. Wayfinding requires the individual to constantly update and review his understanding of his progress, until the destination is reached.

Janet R. Carpman, Ph.D., a noted wayfinding consultant, sums up the process of wayfinding best; *"Wayfinding is behavior. It is not the same as signage. Wayfinding means knowing where you are, knowing your destination, following the best route to your destination, recognizing your destination when you arrive, and being able to reverse the whole process and finding your way back out."*

Wayfinding involves the following:

- Spatial problem solving
- Navigating from Point "A" to Point "B" (and then back to Point "A" again)
- Information gathering - usually by visual cueing (color, texture, lighting, architectural elements, text and/or graphics)
- Paths, landmarks, nodes, edges, and districts (components of a wayfinding system)

  Paths are defined by the plan of the building - its corridors and crossings.

  Landmarks may be an integral part of the architecture or décor

  Nodes are the intersection of two or more paths

  Edges are the boundaries of a district

  Districts are architectural constructions, such as floors or departments

  Material finishes which help define paths and districts

Wayfinding Concepts

The Role of Signage in Wayfinding

Signage supplements and complements the built components of wayfinding. Signage alone cannot adequately convey all of the cues required to help patients, visitors and staff navigate through the healthcare facility, but signage can accomplish the following:

- Serves as landmarks
- Reinforces paths
- Provides information at nodes
- Defines district edges

Components of Wayfinding

Researcher Kevin Lynch coined the term “wayfinding” in his 1960 book "Image of the City". In 1984, environmental psychologist Romedi Passini published the full-length "Wayfinding in Architecture" and expanded the concept to include signage and other graphic communication, clues inherent in the building's spatial grammar, logical space planning, audible communication, tactile elements, and provision for special-needs users.[1]

Our spatial comprehension of a facility is enhanced by its architecture, material finishes, and wayfinding signage. When possible, architectural embellishments can be provided in the facility to promote wayfinding. Although signage is the most universal element in wayfinding, other cueing devices involve artwork, lighting, color and texture.

Common Problems in Wayfinding

Lack of uniformity in signage, along with non-compliance to ADA, seems to be the consistent problem plaguing U.S. Army facilities. Common problems in wayfinding include:

•Insufficient indication of the main entry into the compound

• Inadequacy of orientation information at the entry to the compound

• No identification of the hospital building's main entrance(s)

• Lack of orientation information at entry to the building(s)

• Limited directional information

• Limited reinforcement of directional information

• Inadequacy of existing signage for task

• Lack of consistency in application

• Inconsistent appearance

• Inconsistent placement

• Non-conformance with regulations and requirements

A related issue, which adds to the confusion of the existing wayfinding system, is the practice of numbering the buildings on a compound. While the numbering does have some benefit for locating the building within the compound, it is better suited to identifying the buildings as inventory. Numbering the building does not aid wayfinding once inside the facility. The numbering system must not be confused with a wayfinding solution - although use of the numbers as building identifiers in certain applications is acceptable.

Common Solutions for Wayfinding

Applying common solutions to the problems addressed will not only ease wayfinding within the individual hospitals, but will also standardize elements that will ultimately help users who visit multiple hospitals.

Common Solutions for Wayfinding

Solutions that will ease the wayfinding problems:

- *The main entry of the building must be clearly identified.* The preferred solution to marking the exterior entry is architectural.
- *Orientation & directional information needs to be provided immediately inside each main entry.* This will be the first in a series of branching directional indicators. Kiosks and other freestanding informational displays are generally the most effective.
- *Clear identification of pathways and intersections needs to be present.* Directional signage is required - as a minimum - at all major intersections along a path. Other visual cues include highlighted landmarks and the use of material finishes to define districts.
- *Destinations must be clearly and consistently marked.* This solution incorporates standardized signage placed throughout the facility. Standardization is driven by regulation and utility, such as the Americans with Disabilities Act.

Artwork Application Concepts

Analysis

Artwork initially surveyed in the facilities could be categorized as either program art, personal art or murals. Program art is that which has been put into place with some consideration given to theme, quality, disposition and outfitting. Much of this artwork is of good quality, but in many cases is poorly displayed. Personal art is that which is brought in by the occupants (and usually does not constitute a cohesive collection); this type of artwork varies widely in quality and works best when used in the personal space of the owner (such as a private office or cubicle). Murals are either large photomurals scattered throughout the space, or painted directly onto the wall surface. Painted murals were generally confined to children's areas.

Framed program artwork is more appropriate in these facilities, as it assures uniform quality and greater flexibility than the murals and personal art.

Themes

Themes may be classified into four groups: landscapes, still life, figurative and juvenile. Subject matter is selected upon exclusionary criteria (with juvenile works excepted) - no portraiture, no animals, no food, no optical illusions, and no abstraction that might be offensive in a medical office environment (e.g., harsh line or intense color). Selection is further based upon scale and clarity as necessitated by the environment.

One interesting element concerning art selection that has gained considerable attention is its use as a therapeutic element in healing environments. Artwork that provides positive distraction (such as in chemo treatment areas and LDRPs) is an essential part of the patient's healing and well-being. Images that give hope, serenity and that celebrate life are very positive and are welcome in the healing environment.

Numerous studies have suggested that pictures of nature scenes (either looking out of a window, or looking at a clear photograph of nature) reduces stress in many people. Recent scientific studies conducted by Roger Ulrich, PhD and others report that "that patients who had bedside views of nature had briefer hospital stays and needed less medication (Science, 1984)". [2]

Healing Arts

In 1992 Dr. Ulrich and his colleague Russ Parsons, PhD, reported that "visual exposure to (nature) settings has produced significant recovery from stress within only five minutes, as indicated by changes in physiological measures such as blood pressure and muscle tension." [3] It is proven that scenes of nature "triggers the innate human response to nature which is to relax, recharge, and restore, even within the confines of a healthcare facility". [4]

Selecting the appropriate artwork for various spaces has become increasingly important. There are several art vendors that have GSA contracts and provide art consultation services. It is recommended that these companies are contacted prior to sizable art purchases, and are given an opportunity to create a cohesive, professionally designed art package that supports the healing environment. A list of these vendors is provided at the end of the Products Section 3 of Volume 3.

Artwork Applications

Kathy Hathorn, President of American Art Resources, gives the following advice when selecting themed artwork for healthcare facilities:

Main public spaces – Broadest general appeal to the particular community; non-gender specific themes; geographical pieces work well and are most appropriate choices; "realistic" artwork is preferred over abstract.

Dining areas – Tranquil, restful images that provide relaxation

Administrative areas (includes Human Resources) – Professional, corporate appearance, referencing the management style of the hospital; can reference the type of patient care that is administered (such as pictures of children in a pediatric hospital).

Admissions/Cashier's areas – Warm, inviting, comforting

Chapel – Simple landscapes or seascapes with a meditative quality (particularly if the hospital wants a non-denominational image)

Clinical areas – Images that reduce patient anxiety and that are interesting to gaze over are encouraged; avoid pictures of food.

Chemotherapy or general recovery areas – Clear, still photographs are best

IV Ready rooms – Humorous or light-hearted themes that divert attention work well

Physical Therapy – Sports images work well, or an image that promotes a healthy life or celebrates life is best

Mammography – Beautiful images of general interest to women (i.e., flowers)

Rehab units – Challenging, uplifting, inspiring and contemplative art is encouraged; for head injury, the images are to be simple and clear; avoid double images such as reflection pools or fuzzy impressionistic paintings

Pediatrics – Child-style while maintaining a broad range of appeal as far as age is concerned; primary colors are used extensively for infants and young children, and secondary colors are used for older children

Obstetrics – Actual photographs of people can be used here, but must relate to the community it serves (i.e., Hispanic, Native American, Caucasian, African-American, etc.). Images of babies depicted as fine art in an impressionistic style is encouraged.

LDR/LDRPs – Images that provide positive distraction work well; humorous or light-hearted themes can be used to provide visual interest

Consult Rooms – Quiet, dignified images that impart the hospital's concern

Patient Ward Corridors – Large (somewhere between 26x30 and 32x40 inches); patients' age, gender, length of stay, and reason for hospitalization are to be considered

Psychiatric Units – Artwork that visually stimulates the patient is encouraged, but great care must be given to avoid the following: harsh colors (black, chartreuse, orange, red); jagged lines or images with chaotic movement (such as the work of Van Gogh); optical illusions; landscapes with reflecting images; abstract or surreal images; and figurative art. [5]

Solution

Artwork selections are taken from GSA sources and include photographic art and poster art. Photographic art of nature scenes are preferred in public and patient zones, as these provide positive distraction and assist in patient comfort. [6]

Specification

Consistency in framing and theming is critical in creating a cohesive art collection. Artwork is to be matted and framed in a similar fashion. Recent program art has been framed primarily in brushed chrome or aluminum frames. This, perhaps, is the most versatile solution as it provides a durable material finish with broad applications. In order to derive the fullest benefit from an art program, the works are to be framed with neutral frames and mats appropriately sized to enhance the works.

Posters and prints are to be cropped to remove titles and copy from the presentation. A mat is recommended in order to give the works greater presence. The basic artwork specification is to be as follows:

Framing:
Frame-face dimension is to be approximately 2.54 cm (1")
Brushed or polished chrome or aluminum
Concealed security retaining device

Mat
Mat face to be approximately 3"-5" wide (due to long halls and wide corridors in a hospital setting)
Color to be white, off-white or soft neutral
Double mats to be used for special emphasis - inner mat to be accent color that complements image

Glazing
Window glass is readily available, inexpensive and easy to clean, but is heavy and prone to breaking; not recommended in highly trafficked corridors or psychiatric units, or for prints over 30" x 40"
Acrylic glazing is prone to scratching, but is shatter-resistant; can be more difficult to clean than window glass.

Artwork Installation

According to Kathy Hathorn, President of American Art Resources, the "proper height to install framed artwork is approximately 53" to 63" from the floor to the bottom of the top one-third of the picture. Works in a series are to be hung at the same height, and are not to be staggered or stair-stepped. Generally speaking, the larger or more detailed the image, the farther apart the pieces should be placed."[7]

Security mount devices for framed artwork are highly recommended, particularly when artwork is installed in public spaces such as corridors and waiting spaces.

Artwork Bibliography

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